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FAX TRANSMISSION COVER SHEET

DATE: 09/26/2006

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571-273-0459

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RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/526,127 A
Source: PCT
Date Processed by STIC: 09/26/2006

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DATE: 09/26/2006

PATENT APPLICATION: US/10/526,127A

TIME: 15:07:49

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3 <110> APPLICANT: NOVARTIS AG
4 NOVARTIS PHARMA GMBH
6 <120> TITLE OF INVENTION: OCULAR GENE THERAPY
8 <130> FILE REFERENCE: 116566-010
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/526,127A
C--> 11 <141> CURRENT FILING DATE: 2005-02-28
13 <150> PRIOR APPLICATION NUMBER: PCT/EP03/09497
14 <151> PRIOR FILING DATE: 2003-08-27
16 <150> PRIOR APPLICATION NUMBER: 60/406,470
17 <151> PRIOR FILING DATE: 2002-08-26
19 <160> NUMBER OF SEQ ID NOS: 25
21 <170> SOFTWARE: PatentIn Ver. 3.3
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 183
25 <212> TYPE: PRT
26 <213> ORGANISM: Homo sapiens
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32 Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln
33 20 25 30
35 Cys Phe Gln Gln Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala
36 35 40 45
38 Phe Leu Ser Ser Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala
39 50 55 60
41 Asp Arg Ala Ala Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe
42 65 70 75 80
44 Pro Ser Trp Glu Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro
45 85 90 95
47 Gly Ala Arg Ile Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro
48 100 105 110
50 Thr Trp Pro Gln Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg
51 115 120 125
53 Arg Leu Thr Glu Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser
54 130 135 140
56 Ala Thr Gly Gln Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln
57 145 150 155 160
59 Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn
60 165 170 175
62 Ser Phe Met Thr Ala Ser Lys
63 180
66 <210> SEQ ID NO: 2
67 <211> LENGTH: 551

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68 <212> TYPE: DNA

69 <213> ORGANISM: Homo sapiens

71 <400> SEQUENCE: 2

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73 ggggcatgcg gggcatccgc ggggcccact tccagtgcct ccagcaggcg cgggcccgtg 120
74 ggctggcggg caccctccgc gccctcctgt cctcgcgcct gcaggacctg tacagcatcg 180
75 tgcgcgctgc cgaccgcgca gccgtgcccga tcgtcaacct caaggacgag ctgctgtttc 240
76 ccagctggga ggctctgttc tcaggctctg agggctcgtt gaagcccggg gcacgcatct 300
77 tctcctttga cggcaaggac gtcttgaggc accccacctg gcccagaag agcgtgtggc 360
78 atggctcgga cccaacggg cgcaggetga ccgagagcta ctgtgagacg tggcggacgg 420
79 aggtccctc ggccacggg caggcctcct cgtgtgtggg gggcaggctc ctggggcaga 480
80 gtgccgcgag ctgccatcac gccacatcgt tgctctgcat tgagaacagc ttcagtactg 540
81 cctccaagta g 551
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84 <210> SEQ ID NO: 3

85 <211> LENGTH: 207

86 <212> TYPE: PRT

87 <213> ORGANISM: Mus musculus

89 <400> SEQUENCE: 3

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90 Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
91 1 5 10 15
93 Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
94 20 25 30
96 Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly
97 35 40 45
99 Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly
100 50 55 60
102 Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu
103 65 70 75 80
105 Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn
106 85 90 95
108 Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly
109 100 105 110
111 Ser Gln Gly Gln Leu Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly
112 115 120 125
114 Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His
115 130 135 140
117 Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr
118 145 150 155 160
120 Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu
121 165 170 175
123 Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr
124 180 185 190
126 Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys
127 195 200 205
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130 <210> SEQ ID NO: 4

131 <211> LENGTH: 624

132 <212> TYPE: DNA

133 <213> ORGANISM: Mus musculus

135 <400> SEQUENCE: 4

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136 atggagacag acacactcct gctatgggta ctgctgctct gggttccagg ttccactggt 60
137 gacgcggccc atactcatca ggacttttcag ccagtgtctc acctgggtggc actgaacacc 120
138 cccctgtctg gaggcacatgc tggatatccgt ggagcagatt tccagtgtct ccagcaagcc 180
139 cgagccgtgg ggctgtcggg caccttcagg gctttcctgt cctctaggct gcaggatctc 240
140 tatagcatcg tgcgcctgtc tgaccggggg tctgtgccc tctgtgccc aggggtcaagt gcaaccggg 300
141 gtgctatctc ccagctggga ctccctgttt tctggctccc aggggtcaagt gcaaccggg 360
142 gcccgcctct tttcttttga cggcagagat gtcctgagac acccagcctg gccgcagaag 420
143 agcgtatggc accgctcggc cccagtgagg cggaggctga tggagagtta ctgtgagaca 480
144 tggcgaactg aaactactgg ggctacaggt caggcctcct ccctgtgtgc aggcaggctc 540
145 ctggaacaga aagctgogag ctgccacaac agctacatcg tctgtgtcat tgagaatagc 600
146 ttcatgacct cttctccaa atag 624
149 <210> SEQ ID NO: 5
150 <211> LENGTH: 8
151 <212> TYPE: PRT
152 <213> ORGANISM: Homo sapiens
154 <400> SEQUENCE: 5
155 Ala Pro Gln Gln Glu Ala Leu Ala
156 1 5
159 <210> SEQ ID NO: 6
160 <211> LENGTH: 38
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
166 primer
168 <400> SEQUENCE: 6
169 actggtgacg cggcccatat tcatcaggac tttcagcc 38
172 <210> SEQ ID NO: 7
173 <211> LENGTH: 32
174 <212> TYPE: DNA
175 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
179 primer
181 <400> SEQUENCE: 7
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186 <211> LENGTH: 20
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
192 primer
194 <400> SEQUENCE: 8
195 cactgcttac tggcttatcg 20
198 <210> SEQ ID NO: 9
199 <211> LENGTH: 29
200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
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203 <220> FEATURE:
204 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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207 <400> SEQUENCE: 9
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211 <210> SEQ ID NO: 10
212 <211> LENGTH: 32
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
218     primer
220 <400> SEQUENCE: 10
221 aagggctatc gatctagctg gcagaggcct at
224 <210> SEQ ID NO: 11
225 <211> LENGTH: 35
226 <212> TYPE: DNA
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
231     primer
233 <400> SEQUENCE: 11
234 gatctctaga ccaccatgca tactcatcag gactt
237 <210> SEQ ID NO: 12
238 <211> LENGTH: 30
239 <212> TYPE: DNA
240 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
244     primer
246 <400> SEQUENCE: 12
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251 <211> LENGTH: 18
252 <212> TYPE: PRT
253 <213> ORGANISM: Adenovirus
255 <400> SEQUENCE: 13
256 Met Arg Tyr Met Ile Leu Gly Leu Leu Ala Leu Ala Val Cys Ser
257 1 5 10 15
259 Ala Ala
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264 <211> LENGTH: 96
265 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
270     primer
272 <400> SEQUENCE: 14
273 gatctctaga ccaccatgag gtacatgatt ttaggcttgc tcgcccttgc ggcagtctgc 60

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274 agcgcgggccc atactcatac tcatcaggac tttcag 96
277 <210> SEQ ID NO: 15
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279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence
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283 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
284 primer
286 <400> SEQUENCE: 15 29
287 atcgatcata ctcacagga ctttcagcc
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291 <211> LENGTH: 29
292 <212> TYPE: DNA
293 <213> ORGANISM: Artificial Sequence
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296 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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299 <400> SEQUENCE: 16 29
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304 <211> LENGTH: 23
305 <212> TYPE: DNA
306 <213> ORGANISM: Artificial Sequence
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309 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
310 primer
312 <400> SEQUENCE: 17 23
313 tttttttttc agtgtaaaag gtc
316 <210> SEQ ID NO: 18
317 <211> LENGTH: 19
318 <212> TYPE: DNA
319 <213> ORGANISM: Artificial Sequence
321 <220> FEATURE:
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323 primer
325 <400> SEQUENCE: 18 19
326 cagatgacat cctggccag
329 <210> SEQ ID NO: 19
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331 <212> TYPE: DNA
332 <213> ORGANISM: Artificial Sequence
334 <220> FEATURE:
335 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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338 <400> SEQUENCE: 19 22
339 ctatacagga aagtatggca gc
342 <210> SEQ ID NO: 20
343 <211> LENGTH: 118
344 <212> TYPE: DNA

VERIFICATION SUMMARY

DATE: 09/26/2006

PATENT APPLICATION: US/10/526,127A

TIME: 15:07:50

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5:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date